

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
15 March 2001 (15.03.2001)

PCT

(10) International Publication Number  
**WO 01/17550 A2**

- (51) International Patent Classification<sup>7</sup>: **A61K 39/00**
- (21) International Application Number: **PCT/EP00/08728**
- (22) International Filing Date:  
6 September 2000 (06.09.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
9921147.6 7 September 1999 (07.09.1999) GB
- (71) Applicant (*for all designated States except US*):  
**SMITHKLINE BEECHAM BIOLOGICALS S.A.**  
[BE/BE]; Rue de l'Institut 89, B-1330 Rixensart (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **WETTENDORFF,**  
Martine, Anne, Cecile [BE/BE]; SmithKline Beecham  
Biologicals s.a., Rue de l'Institut 89, B-1330 Rixensart  
(BE).
- (74) Agent: **PRIVETT, Kathryn, Louise;** SmithKline  
Beecham, Two New Horizons Court, Brentford, Middlesex  
TW8 9EP (GB).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ,  
DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian  
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European  
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,  
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— Without international search report and to be republished  
upon receipt of that report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: NOVEL COMPOSITION

(57) Abstract: Novel combined vaccine compositions are provided, comprising a hepatitis B viral antigen and a HPV antigen and optionally in addition one or more of the following: an EBV antigen, a hepatitis A antigen or inactivated attenuated virus, a herpes simplex viral antigen, a VZV antigen, a HCMV antigen, a Toxoplasma gondii antigen. The vaccine compositions are formulated with an adjuvant which is a preferential stimulator of TH1 cell response such as 3D-MPL and QS21.

WO 01/17550 A2